

Listing of Claims:

1. (Currently Amended) A non-ionic styrenic resin composition with at least improved toughness properties, said styrenic resin composition comprising:

from about 92.0% to about 99.9% by weight of a non-ionic rubber modified styrene maleic anhydride copolymer; [[and]]

from about 0.1% to about 8.0 % by weight of polybutene based on the weight of the non-ionic styrenic resin composition, and

optionally, stabilizers, antioxidants, lubricants, fillers, pigments, and/or plasticizers.

2. (Currently Amended) A non-ionic styrenic resin composition of claim 1 wherein the amount of said polybutene ranges from about 2 to about 6 weight percent based on the weight of the styrenic resin composition.

3. (Currently Amended) A non-ionic styrenic resin composition of claim 2 wherein the amount of said polybutene ranges from about 3% to about 5% by weight based on the weight of the styrenic resin composition.

4. (Currently Amended) A non-ionic styrenic resin composition of claim 1 wherein said polybutene has a number average molecular weight ranging from about 900 to about 2500.

5. (Currently Amended) A non-ionic styrenic resin composition of claim 4 wherein said polybutene has a number average molecular weight ranging from about 900 to about 1300.

6. (Currently Amended) A non-ionic styrenic resin composition of claim 1 wherein said styrenic resin composition is prepared by adding polybutene to styrene monomers, maleic anhydride,

and rubber in a polymerization reactor vessel under free radical polymerization techniques.

7. (Currently Amended) A non-ionic styrenic resin composition of claim 1 wherein said styrenic resin composition is prepared by adding the polybutene to partially polymerized syrup comprised of rubber, styrene, and maleic anhydride after the syrup exits a polymerization reactor vessel and enters a devolatilizer.

8. (Currently Amended) A non-ionic styrenic resin composition of claim 1 wherein said rubber modified styrene maleic anhydride copolymer is comprised of from about 2% to about 25% by weight of maleic anhydride and from about 4% to about 20% by weight of rubber based on the weight of said rubber modified styrene maleic anhydride copolymer.

9. (Currently Amended) A non-ionic styrenic resin composition of claim 8 wherein the amount of rubber ranges from about 8% to about 15% by weight.

10. (Currently Amended) A non-ionic styrenic resin composition of claim 8 wherein the particle size of the rubber ranges from about 0.1 micron to about 11 microns.

11. (Currently Amended) A non-ionic styrenic resin composition of claim 10 wherein the particle size of the rubber is less than 6 microns.

12. (Currently Amended) A non-ionic styrenic resin composition of claim 11 wherein the particle size of the rubber ranges between from about 0.1 micron to about 5 microns.

13. (Currently Amended) A non-ionic styrenic resin composition of claim 8 wherein said rubber is polybutadiene.

14. (Currently Amended) A non-ionic styrenic resin composition of claim 8 wherein said rubber is selected from the group consisting of high cis polybutadiene and medium cis polybutadiene.

15. (Currently Amended) An article produced from the non-ionic styrenic resin composition of claim 1.

16. (Currently Amended) A container suitable for use in microwave heating of food and formed from the non-ionic styrenic resin composition of claim 1.

17. (Currently Amended) A multi-layer container suitable for use in microwave heating of food, said container comprising a substrate layer and a layer comprised of the non-ionic styrenic resin composition of claim 1.

18. (Currently Amended) A method for preparing the non-ionic styrenic resin composition of claim 1 comprising:

    adding polybutene to partially polymerized syrup comprised of rubber, styrene, and maleic anhydride after the syrup exits a reactor and enters a devolatilizer.

19. (Currently Amended) A method for preparing the non-ionic styrenic resin composition of claim 1 comprising:

    forming a solution of polybutene, maleic anhydride, and rubber by dissolving the polybutene, the maleic anhydride and the rubber in styrene monomer,

continuously feeding the solution with said styrene monomer into a polymerization reactor vessel, and

devolatilizing the stream exiting the polymerization reactor vessel thereby producing the styrenic resin composition.

20. (Currently Amended) A method for preparing the non-ionic styrenic resin composition of claim 1 comprising:

adding polybutene and styrene maleic anhydride rubber feed separately into a polymerization reactor vessel,

polymerizing the styrene maleic anhydride feed in the presence of the polybutene and the rubber in the polymerization reactor vessel, and

devolatilizing the stream exiting the polymerization reactor vessel thereby producing said non-ionic styrenic resin composition.

21. (Currently Amended) A method for preparing the non-ionic styrenic resin composition of claim 1 comprising:

forming a solution of maleic anhydride and rubber in styrene monomer,

continuously feeding said solution with said styrene monomer into a polymerization reactor vessel to produce a partially polymerized styrenic syrup,

adding polybutene to said partially polymerized styrenic syrup after it exits the reactor vessel and devolatilizing the stream after the polybutene has been added to the partially polymerized styrenic syrup thereby producing the non-ionic styrenic resin composition.

22. (Currently Amended) A method for preparing the non-ionic styrenic resin composition of claim 1 comprising:

forming a solution of maleic anhydride and rubber in styrene monomer,

continuously feeding said solution with said styrene monomer into a polymerization reactor vessel to produce a partially polymerized styrenic syrup,

devolatilizing the stream exiting the polymerization reactor vessel, and

compounding polybutene into the stream in an extrusion process thereby producing the styrenic resin composition.

23. (Currently Amended) A method for preparing the non-ionic styrenic resin composition of claim 1, comprising:

adding said polybutene to said rubber modified styrene maleic anhydride copolymer after the devolatilizer and the pelletizer.

24. (Currently Amended) A method for preparing the non-ionic styrenic resin composition of claim 1 comprising:

adding said polybutene to said rubber modified styrene maleic anhydride copolymer after the devolatilizer and before the pelletizer.